

Amory Hoste

Edinburgh, United Kingdom • Belgian Citizen

Please contact me on [Linkedin](#) for a version with full contact details.

SUMMARY

Versatile, hands-on software engineer with experience building resource efficient and performant cloud infrastructure. Specifically compute services, serverless and systems for machine learning.

WORK EXPERIENCE

Huawei R&D UK, Senior Research Engineer L17 - Systems
Edinburgh, UK

May 2023–Present

- Designed and implemented new scheduling algorithm reducing performance interference of colocated cluster workloads across shared resources.
- Currently working on accelerator sharing and resource disaggregation, specifically aimed towards machine learning workloads.
- Skills: Go, C++, CUDA, Hardware Accelerators, Hardware Performance Counters, eBPF

Huawei R&D UK, Research Engineer L16 - Systems
Edinburgh, UK

Nov 2021–May 2023

- Developed representative benchmark suite, load generator, infrastructure and experiment automation for evaluation of various projects.
- Built new distributed scheduling architecture with improved scalability, fault-tolerance, high resolution metrics capture and reduced metric staleness compared to existing solutions.
- Implemented various scoring algorithms for compute workloads, balancing resource utilization and performance degradation due to overcommitment.
- Proposed several new research directions and architecture improvements. Mentored intern towards implementation and evaluation of one such proposal.
- Skills: Go, Python, Kubernetes, Serverless, Microservices, Prometheus, Ansible, Performance Analysis

IDLab, Research Intern
Ghent, Belgium

Summer 2018 & 2019

- Developed web archival and web archive quality analysis tools for the PROMISE web archival project by the Royal Library of Belgium.
- Developed fragmented linked data R-tree index and client to enable efficient geospatial queries of linked data.
- Created scraping and conversion scripts to expose live bike sharing data as linked data.

EDUCATION

ETH Zurich

Sep 2019–Sep 2021

MSc Computer Science. Grade: 5.71/6 (Rank: Top 10%).

- Focus on (Distributed) Systems and High Performance Computing.
- Thesis: Analysis and Optimization of Serverless Cold Start Latencies through Function Snapshots.

Ghent University

Sep 2016–Jun 2019

BSc Computer Science. Grade: 808/1000 (Rank: 1st of class).

TECHNICAL SKILLS

Languages: Go, C, C++, Python, CUDA
Technologies: Kubernetes, Prometheus, Container Runtimes, eBPF, Serverless (Faas)
Other: Cloud Infrastructure, Distributed Systems, Operating Systems, Heterogeneous Hardware

INTERESTS

Outside of work, I enjoy tinkering with technology, piano, running, football, hiking and ski touring.